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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,013	02/13/2002	Jeffrey M. Stefan	GP-302117	1333

7590 03/10/2005

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EXAMINER

LY, NGHI H

ART UNIT PAPER NUMBER

2686

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

*Supplemental*  
**Office Action Summary**

Application No.

10/077,013

Applicant(s)

STEFAN ET AL.

Examiner

Nghi H. Ly

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 October 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*Supplemental*

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 7-11, 15-17, 20 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Wakamatsu et al (US 6,819,268).

Regarding claim 1, Wakamatsu teaches a method of providing information to a mobile vehicle user (see Abstract and column 1, lines 23-33, see “moving body such as vehicle”) comprising: receiving broadcast information at the mobile unit (column 1, lines 23-33, see “news, weather forecast”), wherein the broadcast information comprises information location coordinate data (see column 1, lines 43-54, see “target area information whose target area is specified may be added to the information” and see “postal code” or “area name” reads on Applicant’s “information location coordinate data”), determining whether the information location coordinate data resides within a convex hull (see column 2, line 1 to column 4, line 48), and presenting the broadcast information to the mobile user based on the determination (see Abstract and column 2, line 1 to column 4, line 48, see “for display the information...”, and see column 13, lines 36-55).

Regarding claim 2, Wakamatsu further teaches the broadcast information is received from a broadcast service selected from a group consisting of a radio data service, a radio broadcast data service, a satellite broadcast service, a radio broadcast service, and a wireless communications broadcast service (see column 1, lines 23-33).

Regarding claim 3, Wakamatsu further teaches the information location coordinate data comprises a longitude and a latitude associated with the broadcast information (column 9, lines 37-39, see "latitude" and "longitude").

Regarding claim 7, Wakamatsu further teaches transferring the broadcast information to a vehicle presentation manager (see column 1, lines 23-54 and see fig.1, navigation controller 1), rendering the broadcast information with the vehicle presentation manager (see column 1, lines 23-54 and column 2, lines 1-34), and sending the broadcast information to a presentation device (see column 1, lines 23-54 and column 2, lines 1-34).

Regarding claim 8, Wakamatsu further teaches the presentation device is selected from a group consisting of a visual display, an audio device, and an audio-visual display device (see Abstract and column 1, lines 39-42).

Regarding claim 9, Wakamatsu teaches a computer usable medium including a program for providing information to a mobile vehicle user (see Abstract and column 1, lines 23-33, see "moving body such as vehicle") comprising: computer program code to receive broadcast information at the mobile vehicle (column 1, lines 23-33, see "news, weather forecast"), wherein the broadcast information comprises information location coordinate data (see column 1, lines 43-54, see "target area information whose target

area is specified may be added to the information” and see “postal code” or “area name” reads on Applicant’s “information location coordinate data”), computer program code to determine whether the information location coordinate data resides within a convex hull (see column 1, lines 43-54, see “target area information whose target area is specified may be added to the information” and see “postal code” or “area name” reads on Applicant’s “information location coordinate data”), and computer program code to present the broadcast information to the mobile vehicle user based on the determination (see Abstract and column 2, line 1 to column 4, line 48, see “for display the information...”, and see column 13, lines 36-55).

Regarding claim 10, Wakamatsu further teaches the broadcast information is received from a broadcast service selected from a group consisting of a radio data service, a radio broadcast data service, a satellite broadcast service, a radio broadcast service, and a wireless communications broadcast service (see column 1, lines 23-33).

Regarding claim 11, Wakamatsu further teaches the information location coordinate data comprises a longitude and a latitude associated with the broadcast information (column 9, lines 37-39, see “latitude” and “longitude”).

Regarding claim 15, Wakamatsu further teaches computer program code to transfer the broadcast information to a vehicle presentation manager (see column 1, lines 23-54 and see fig.1, navigation controller 1), computer program code to render the broadcast information with the vehicle presentation manager; and computer program code to send the broadcast information to a presentation device (see column 1, lines 23-54 and column 2, lines 1-34).

Regarding claim 16, Wakamatsu further teaches the presentation device is selected from a group consisting of a visual display, an audio device, and an audio-visual display device (see Abstract and column 1, lines 39-42).

Regarding claim 17, Wakamatsu teaches a system for providing information to a mobile vehicle user (see Abstract and column 1, lines 23-33, see "moving body such as vehicle") comprising: means for receiving broadcast information at the mobile vehicle (column 1, lines 23-33, see "news, weather forecast"), wherein the broadcast information comprises information location coordinate data and at least one data string (see column 1, lines 43-54, see "target area information whose target area is specified may be added to the information" and see "postal code" or "area name" reads on Applicant's "information location coordinate data"), means for determining whether the information location coordinate data resides within a convex hull (see column 2, line 1 to column 4, line 48), and means for presenting the broadcast information to the mobile vehicle user based on the determination (see Abstract and column 2, line 1 to column 4, line 48, see "for display the information...", and see column 13, lines 36-55).

Regarding claim 20, Wakamatsu further teaches transferring the broadcast information to a vehicle presentation manager (see column 1, lines 23-54 and see fig.1, navigation controller 1), means for rendering the broadcast information with the vehicle presentation manager (see column 1, lines 23-54 and column 2, lines 1-34), and means for sending the broadcast information to a presentation device (see column 1, lines 23-54 and column 2, lines 1-34).

Regarding claim 21, Wakamatsu teaches a method of providing information to a mobile vehicle user (see Abstract and column 1, lines 23-33, see “moving body such as vehicle”) comprising: receiving broadcast information at the mobile vehicle (column 1, lines 23-33, see “news, weather forecast”), wherein the broadcast information comprises information location coordinate data (see column 1, lines 43-54, see “target area information whose target area is specified may be added to the information” and see “postal code” or “area name” reads on Applicant’s “information location coordinate data”), determining whether the information location coordinate data resides within a convex hull incorporating data from an in-vehicle GPS (see column 5, lines 57-61), and presenting the broadcast information to the mobile vehicle user based on the determination (see column 5, lines 57-61).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 4-6, 12-14, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wakamatsu et al (US 6,819,268) in view of Park (US 5,627,549).

Regarding claim 4, Wakamatsu teaches claim 1. Wakamatsu does not specifically disclose generating the convex hull from the recorded vehicle location coordinates.

Park teaches generating the convex hull from the recorded vehicle location coordinates (see column 7, lines 15-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Park into the system of Wakamatsu in order to construct a database containing locations of particular interest to a particular person (see Park, Abstract).

Regarding claim 5, Wakamatsu teaches claim 1. Wakamatsu does not specifically disclose updating the convex hull based on a coordinate input.

Park teaches updating the convex hull based on a coordinate input (see column 7, lines 12-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Park into the system of



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Wakamatsu in order to construct a database containing locations of particular interest to a particular person (see Park, Abstract).

Regarding claim 6, Wakamatsu further teaches the coordinate input is selected from a group consisting of a current vehicle location coordinate, a previous vehicle location coordinate, a recorded vehicle location coordinate input, a collection period, a collection frequency, a vehicle location coordinate retention period, a global positioning service quality indicator (see column 2, lines 1-24 and column 9, lines 37-39, see "latitude" and "longitude").

Regarding claim 12, Wakamatsu teaches claim 9. Wakamatsu does not specifically disclose computer program code to record a plurality of vehicle location coordinates, and computer program code to generate the convex hull from the recorded vehicle location coordinates.

Park teaches computer program code to record a plurality of vehicle location coordinates (see column 7, lines 15-18), and computer program code to generate the convex hull from the recorded vehicle location coordinates (see column 7, lines 15-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Park into the system of Wakamatsu in order to construct a database containing locations of particular interest to a particular person (see Park, Abstract).

Regarding claim 13, Wakamatsu teaches claim 9. Wakamatsu does not specifically disclose computer program code to update the convex hull based on a coordinate input.

Park teaches computer program code to update the convex hull based on a coordinate input (see column 7, lines 12-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Park into the system of Wakamatsu in order to construct a database containing locations of particular interest to a particular person (see Park, Abstract).

Regarding claim 14, Wakamatsu further teaches the coordinate input is selected from a group consisting of a current vehicle location coordinate, a previous vehicle location coordinate, a recorded vehicle location coordinate input, a collection period, a collection frequency, a vehicle location coordinate retention period, a global positioning service quality indicator, and a user location coordinate input (see column 2, lines 1-24 and column 9, lines 37-39, see "latitude" and "longitude").

Regarding claim 18, Wakamatsu teaches claim 17. Wakamatsu does not specifically disclose recording a plurality of vehicle location coordinates; and means for generating the convex hull from the recorded vehicle location coordinates.

Park teaches recording a plurality of vehicle location coordinates (see column 7, lines 15-18), and means for generating the convex hull from the recorded vehicle location coordinates (see column 7, lines 15-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Park into the system of Wakamatsu in order to construct a database containing locations of particular interest to a particular person (see Park, Abstract).

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Regarding claim 19, Wakamatsu teaches claim 17. Wakamatsu does not specifically disclose updating the convex hull based on a coordinate input.

Park teaches updating the convex hull based on a coordinate input (see column 7, lines 12-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Park into the system of Wakamatsu in order to construct a database containing locations of particular interest to a particular person (see Park, Abstract).

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (703) 605-5164. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi H. Ly

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23/04/25

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